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(54) Title: METHODS OF ASSESSING ENDOTHELIAL DYSFUNCTION USING ACUTE TRANSIENT RESPONSE FOLLOWING FAT ADMINISTRATION

(57) Abstract: The present invention provides methods utilizing the fat-induced antibody response (FIAR) to assess endothelial function. Additional methods are provided that utilize FIAR for diagnosing and monitoring the progression of vascular diseases, the success of treatment for these diseases, and as a measure of the oxidative stress imposed upon vascular endothelium. Still more methods are provided for measuring the oxidation products of lipids in blood following the administration of a polyunsaturated fatty acid (fat-induced acute response) to monitor the treatment success of a vascular disease, for monitoring the degree of endothelial inflammation, and for diagnosing and monitoring the progression of a cardiovascular disease.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/28525

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G01N 33/53

US CL : 436/547, 71

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 436/547, 71

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	Tinahones et al. Increase levels of anti-oxidized low-density lipoprotein antibodies are associated with reduced levels of cholesterol in the general population. Metabolism April 20002, Vol. 51, No. 4, pages 429-431, whole document, especially see Discussion.	1-63
A	Hulthe et al. Relationship between C-reactive protein and intima-media thickness in the carotid and femoral arteries and to antibodies against oxidized low-density lipoprotein in healthy men: the atherosclerosis and insulin resistance study. Clinical Science 2000 Vol. 100, pages 371-378, whole document.	1-63
Y	Tanaga et al. Increased circulating malondialdehyde-modified LDL levels in patients with coronary artery diseases and their associated with peak sizes of LDL particles. April 2002 Vol. 4, pages 662-666, whole document.	1-63

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☐ See patent family annex.

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